

REMARKS

Claims 1-19 are pending in the present application. Claims 1, 6-9, 11, and 17-19 are amended to meet § 112, second paragraph by changing "and/or" to "and".

The Office Action rejected claims 1-18 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicants regard as the invention.

Applicants traverse these rejections, because claims 1, 6-9, 11, and 17-19 are amended to meet § 112, second paragraph by changing "and/or" to "and". Claims 2-5, 10, and 12-16 did not contain "and/or".

The Office Action rejected claims 1-8, 11-16, 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,692,501 to Minturn ("Minturn") in view of U.S. Patent No. 5,937,387 to Summerell et al. ("Summerell").

Applicants traverse these rejections, because the combination of Minturn and Summerell does not teach or suggest every element of the claims. For example, Minturn/Summerell does not teach or suggest predicting life expectancy. In general, the standards of comparison and the models differ between Minturn/Summerell and the claimed invention. The claimed invention is more versatile.

Claim 1 recites, *inter alia*, "a means for predicting life expectancy based upon said health profile data and said altered or adjusted data." The Office Action states Minturn does not disclose this element and cites figures 10 and 30 of Summerell for this element. Figure 10 "exemplifies the final curve model points (attributes) for two individuals" used to determine the physiological age and figure 30 "shows an example of the physiological age factor effect calculation process." "To determine the physiological age, one must first generate the absolute survival data set for a standard population, generate the

absolute mortality data set, determine the absolute survival proportion curve parameters for each relative risk population, generate the final survival curve model points (attribute) from β_1 to β_0 , and then calculate the physiological age." (Summerell, col. 7, lines 9-10; col. 11, line 64 to col. 12 line 16). This is not the same as the claimed "means for predicting life expectancy". "Upon completing or updating the personal profile questionnaire, a graph depicting the user's physiological age is presented to the user." (Summerell, col. 11, lines 36-38). The result of Summerell is a current physiological age, while the claimed invention predicts a life expectancy.

Summerell is generally directed to a computer program, which enables an interested individual to navigate through a series of questions to describe the subject's important health information. (Summerell, col. 8 line 30 to col. 9 line 25). Once the subject's health profile is in the model, a calculated physiological age is presented to the user based on standard mortality rates from census data and adjusted by published relative risks for health characteristics of the subject. (Summerell, figure 8, col. 11 line 50 to col. 14 line 18). The influence of various actions, defined by the designer and based on relative change in health from published data are presented as the potential change in the calculated physiological age based on what might occur if these actions are instituted. (Summerell, col. 17 lines 7-14). Thus, the Summerell model gives both directionality and relative strength of a change if a user chooses to undertake the actions available. (Summerell, col. 15 line 5 to col. 13 lines 16-35). In summary, this model collects subject information from a questionnaire, uses an external standard from census-based mortality rates, adjusts the model from published medical literature, and presents the user with a finite number of designer-defined actions to modify the user's health status. Importantly, the model limits the amount of important health information used in the modeling process, uses an external standard which can only be presumed to be generalizable to the subject, and limits the number of choices of healthy actions to those actions identified as significant by the designer.

In Minturn, health information is gathered in a modeling process through a questionnaire, a physical health assessment, and objective laboratory data to define the subject's health status. (Minturn, abstract). The profile is then compared to an external standard, a "super healthy" cohort of individuals. (Minturn, abstract). Deviation of the subject from the standard is graded for a finite number of parameters and represented in compiled fashion. (Minturn, figure 9, col. 11 lines 37-55). Predetermined healthy actions defined by the designer are presented to the user depending on their level on the health scale. (Minturn, col. 14 lines 12-33). The influence of these actions on the health status of the subject would require reassessment of the individual (questionnaire, physical, and laboratory), a re-entry of the subject's data into the model, and the

comparisons to the standard repeated to determine improvement or deterioration of the health status. In all, the Minturn model collects subject information from a questionnaire, physical assessment, and laboratory data, uses an external standard from a previously studied "super healthy" population, adjusts the model from important confounding variables, and presents the user with a finite number of designer-defined actions to modify the user's health status. (Minturn, col. 9 line 59 to col. 11 line 35). Like the Summerell model, Minturn's model limits the amount of important health information used in the modeling process, uses an external standard which may not be generalizable to the subject, and limits the number of choices of "healthy actions" to those actions identified as significant by the designer.

By contrast, claim 1 is not limited in those ways. Life expectancy is predicted based upon stored health profile data of any individuals who are in possession of their health data. It is an internal standard, rather than the external standards of Summerell and Minturn. The internal standard incorporates altered or adjusted health profile data. Therefore, for all the above reasons, claim 1 is patentable over Minturn/Summerell.

Claims 2-8 depend directly or indirectly from claim 1 and, thus, inherit the patentable subject matter of claim 1. Therefore, claims 2-8 are also patentable over Minturn/Summerell.

Claim 11 recites, *inter alia*, "determining life expectancy by reducing said predetermined life expectancy based upon said health profile data and/or said altered or adjusted data." Claim 11 is patentable over Minturn/Summerell for the same reasons given above with respect to claim 1.

Claims 12-16 depend directly or indirectly from claim 11 and, thus, inherit the patentable subject matter of claim 11. Therefore, claims 12-16 are also patentable over Minturn/Summerell.

Claim 18 recites, *inter alia*, "determining life expectancy by reducing said predetermined life expectancy based upon said health profile data and/or said altered or adjusted data." Claim 18 is patentable over Minturn/Summerell for the same reasons given above with respect to claim 1.

Claim 19 recites, *inter alia*, "determining life expectancy by reducing said predetermined life expectancy based upon said health profile data and/or said altered or adjusted data." Claim 19 is patentable over Minturn/Summerell for the same reasons given above with respect to claim 1.

The Office Action rejected claims 9, 10, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Minturn and Summerell over Minturn in view of Summerell and further in view of U.S. Patent No. 5,867,821 to Ballantyne et al. ("Ballantyne").

Applicants traverse these rejections, because claims 9, 10, and 17 depend from claims 1 and 11 and inherit the patentable subject matter of claims 1 and 11. Minturn/Summerell do not teach or suggest at least predicting life expectancy. Applicants have carefully reviewed Ballantyne and cannot find this element in Ballantyne either. Therefore, claims 9, 10, and 17 are patentable over the combination of Minturn, Summerell, and Ballantyne.

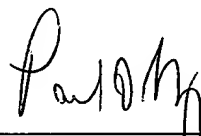
The claimed invention is more versatile than the references cited. Minturn and Summerell deals with a selected group of individuals, while the claimed invention encompasses all individuals who are in possession of their health data and provides for continuous updates and evaluation of their health experiences. The claimed invention uses a personal, internal standard and allows for dynamic, continuous data collection over the life of a subject and predicts the impact of health actions on an individual's life expectancy.

In view of the foregoing, Applicants respectfully submit that all of the claims in the present application are patentably distinguishable over the references cited in the Office Action. Accordingly, Applicants respectfully request reconsideration and that the claims be passed to allowance.

Respectfully submitted,

11-10-03

Date



Paul D. Greeley, Esq.

Reg. No. 31019

Attorney for the Applicant

Ohlandt, Greeley, Ruggiero & Perle, L.L.P.

One Landmark Square, 10th Floor

Stamford, CT 06901-2682

Tel: 203-327-4500

Fax: 203-327-6401